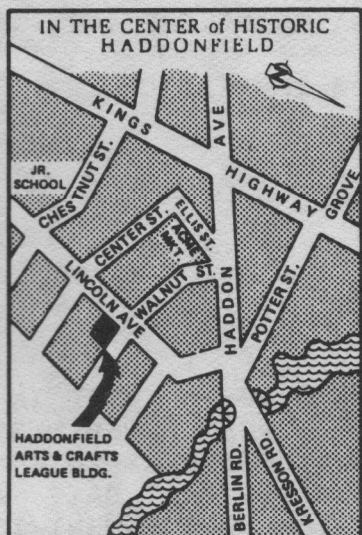# BETWEEN BYTES

NEXT MEETING
WED, FEB. 18
7:30 PM

KEN ADAMS
DEMONSTRATES
TURBO BASIC

BOB GEAYER
SHOWS UP ON THE
LEADER BOARD

DAN BORIS &
SURPRISES!

Q&A FORUM AND
TECH CORNER

IN THE CENTER of HISTORIC
HADDONFIELD

KINGS
AVE
JR. SCHOOL
CHESTNUT ST.
HIGHWAY
GROVE
CENTER ST.
ELLIS ST.
LINCOLN AVE
WALNUT ST.
HADDON
POTTER ST.
HADDONFIELD
ARTS & CRAFTS
LEAGUE BLDG.
BERLIN RD.
KRESSON RD.

JACS MEETS THIRD WED.
EACH MONTH

EXTRA! EXTRA!

PLEASE TAKE NOTE: JACS MEETING NIGHT HAS BEEN CHANGED

THIS MONTH'S MEETING WILL BE HELD ON WEDNESDAY, FEBRUARY 18

JERSEY ATARI COMPUTER SOCIETY
P.O. BOX 710
Clementon, NJ 08021

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CO-EDITOR
  Mark Wetzel

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  Irv Feinberg
ST COORDINATOR
  Bob Whipple

JACS BBS

SYSTEM OPERATOR
  Curtis Fickenscher
    Voice
    BBS   609-346-1224

We reserve the right to edit any material for inclusion and make any corrections of articles.

BETWEEN BYTES
FEBRUARY 1987

INSIDE INFO

AND MORE

ENJOY!

ARTICLES TO BE INCLUDED IN THE MARCH ISSUE OF BETWEEN BYTES MUST BE RECEIVED BY FEBRUARY 25. MATERIAL RECEIVED AFTER THAT DATE MAY BE UTILIZED IN A SUBSEQUENT ISSUE.

MEETING NOTES

KENNETH ADAMS, PROGRAM DIRECTOR

Did you ever wish that Basic could be just a little bit faster? Well hang on to your hats, because JACS is proud to announce a New Wonder from the Old World. It's called Turbo Basic and it's gonna blow your socks off.

Turbo Basic is a public domain program from the Atari Users Group in Holland. It helps mark what will hopefully be only the beginning of a new generation of high quality public domain software. Turbo Basic is a Basic language interpreter like Atari Basic but with many advantages. The most significant of these is it's lightning fast execution speed.

Turbo Basic can run an Atari Basic program, without modification, from three to five times faster. In addition to the usual Atari Basic commands and functions, Turbo Basic adds 22 more functions, 42 more commands and 1,603 more bytes of program space. Turbo Basic adds DOS commands for listing directories, renaming, deleting, locking, unlocking and even binary loads. Turbo Basic includes advanced graphics and sound commands for player/missle control, graphics fill, circle and double precision sound control. Advanced code management commands for renumbering and deleting lines, displaying variable lists and tracing program execution are included. Turbo Basic has advanced programming functions for handling procedures and loops, enhanced disk I/O and memory addressing. And more!!

And if the lightning fast Turbo Basic interpreter doesn't give you wind burns, then try the Turbo Basic Compiler and Run-Time Library. Yes, that's right folks, for this amazingly low price, if you act now, you also get a Compiler at no additional cost.

A compiler!! Can you believe it?? How can we make these incredible deals and still survive? We're a user group, we're not supposed to make any money. (At least no one supposed to know about it!)

As you can probably guess, this an amazing product. I haven't seen anything for 8-bit Atari's this exciting in a long time. And it's practically free! Buy it this month as the JACS Disk of the Month.

Also this month we might get to see a little return on our investment. In case you didn't realize, JACS paid for those $20 and $30 programs that were given away free at December's meeting. There were seven of them in all. So you lucky winners out there, we're all hoping to see a demo and some kind of review. Please, don't put Editor Doug out of work.

Anyway, Bob Geayer, Lucky Winner Type, will be showing us his coveted prize, Leader Board. Dan Boris will show us what's in his closet and we may even have a surprise celebrity guest.

So come on down and get the deal of the century and Turbo charge your 8-bit for a song.
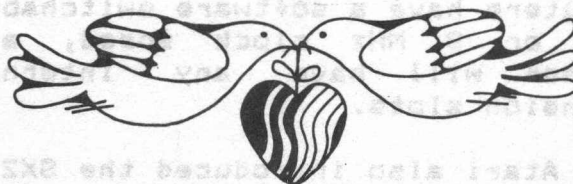
A NOTE FROM THE PRESIDENT

A few announcements are in order concerning our monthly meetings. Due to circumstances beyond our control, the JACS meeting night has been changed from the third Tuesday to the third Wednesday of each month, beginning this month. Apparently the Haddonfield Arts League has recently booked up every Tuesday night for the remainder of 1987, for art classes. Since we have only occupied the building one Tuesday a month, it was not economically feasable for the Arts League to reserve every Tuesday night for JACS. We have also been informed that the monthly rental would be raised from $35 to $55, still a bargain considering the other locations we've contacted. We've also been requested to respect the placement of the art work around the meeting room, and to keep the building as clean as possible. Any items which were moved in preparation for our meeting should be returned to their original location.

The latest word from Atari indicates they will be producing an IBM PC clone, complete with a custom chip which supports the Color Graphics Adapter, Hercules, and IBM monochrome graphics. For $499 you'll get the computer and a disk drive, while $699 will buy you an enhanced computer which also supports the Enhanced Graphics Adapter, a disk drive and a monochrome monitor. Both computers have a software switchable 4.77 or 8 MHz clock speed, and neither will have any internal expansion slots.

Atari also introduced the SX212

300/1200 baud Hayes compatable modem for $99, expanded memory versions of the ST, and a 300 dots/inch laser printer which will go for less than $1500. Atari also lowered the price of most of it's ST hardware by $100, and it lowered the price of it's 520ST monochrome system from $799 to $499!

I think it'll be interesting to find out what Atari loans us this year to display at the Trenton Computer Festival in April - any volunteers to work at the show???

Your President,

Forrest Blood

Forrest Blood
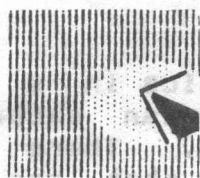
BITS & PIECES
Irv Feinberg

QWIK-PIX has recently been released by WHITE LION SOFTWARE. It works with both Atariwriter and Atariwriter Plus. By the time you read this it will be compatable with Paper Clip also. It is a unique product that will take a PRINT SHOP graphic icon and convert it into a form which can be used with and expand the word processing process.

Like Print Shop, Qwik-Pix is easy to use. It has been designed so that you can use it without a manual, but a well written manual is included. Now, within Atariwriter, you have the ability to print graphics where-ever you like.

Use Qwik-Pix to create and store Letterheads, Titles and Headlines. Using the Option-Insert (MAIL MERGE) feature of Atariwriter, create your own personalized lables. Special Borders have been included in the program to be used at the bottom of a letterhead or you can add a border to the end of any Atariwriter or Atariwriter Plus text file.

Quik-Pix works with any Epson 100% graphics compatable printer. It is also one of the first programs for the 8 bit computer to use a "desktop" user interface. Drop down menues, windows and on screen help are some of the many unique features.

Following are examples showing how Quik-Pix can be used to individualize your own letter.

Irv Feinberg
22 Meetinghouse Rd
Vincentown, NJ 08088

Nathan Hale
456 My Street
Boston, MA 22222

FRAN SMITH
777 NORTH HWY.
RIDGE, NY 44554

HERE IS A SAMPLE OF MAILING LABELS USING THE OPTION-INSERT (MAIL MERGE) FEATURE OF ATARIWRITER.

A seperate file with all the names to be mailed was created and saved to disk.

Qwik Pix converted the arrow, which was created using Print Shop Companion. As a graphic, it leaves a lot to be desired, but as a sample of the uses of Qwik Pic conversions, it illustrates the capabilities built into the program.

The placement of the text can be changed manually from within Atariwriter as described in the manual. It is a simple matter to change the blocks on which the text prints by moving the Option-Insert symbol.

In short Qwik Pix'es versatility and ease of use make it a superb accessory program for Atariwriter and Atariwriter Plus users.

January Meeting Minutes
by Pat Close, Secretary

President Forrest Blood called the meeting to order at 7:45PM. There was good news and bad news. The good news - Atari stock continues to rise. Those persons buying the original issue have made a tidy profit. The bad news - we must change our meeting night to Wednesdays starting February. We had no choice as Wednesday was the only night available. Forrest had more bad news. Our rent has been increased. We have looked into a number of alternate sights for our meeting but nothing centrally located as been found to date. Members are encouraged to inform the Executive Committee of any possible meeting sights which they may know about. We sincerely hope the change will not cause a problem to the membership.

The time has come to think about the Trenton Computer Show. This year it will be held on April 11th and 12th. Sandy Austin, Atari's User Group Coordinator, was contacted to see if anything special was planned for the show. We will probably have a booth and need workers so keep these dates in mind. There will be more about the Trenton Show as it gets closer.

Our SYSOP, Curtis Fickenscher, was pleased to report the new system is all we hoped for. It has not collapsed since it was put into operation. With the 192K Ram disk, access is much faster and response are much quicker.

Eli Tomlinson from Microdaft was to have demonstrated the "Chipmunk" disk backup system. He was unable to appear as scheduled, so Irv Feinberg came to the rescue with a demo of JACS new Disk of the Month "Icon Shop". This disk was designed to save graphics in a DOS 2.0 format so users can exchange creations over a modem. There are directions on the disk that can be displayed on the screen or printed. It is extremely versatile as a drawing program and Gregg Tavares of the Nightmare Group deserves a round of applause for sharing it with us.

Forrest showed us a Public Domain disk for the ST. This disk boasts 408K and allows extended storage for the disk drive. The disk also contains a speech systhesizer similar to the program Sam of 8-Bit fame.

The winner of the 50/50 drawing was Brian Colflesh. Winner of the Door Prize, a package of colored computer paper, was Joe Verble. As an extra surprise, ST Tool Box and an issue of Start magazine were added to the door prize drawing. They were won by Bob Whipple and Ray Bush respectively

NEWSLETTER REVIEW

by Daniel Boris

As you may have noticed, my column was not in the last two newsletters, but I am back this month. Before I get to the reviews, I would like to clarify something. The newsletters which we recieve are starting to provide a lot more ST coverage. It can be hard sometimes distinguising between ST and 8-bit articles and reviews. In my reviews it can be assumed that an article is for the 8-bit computers unless it specifically says that it is for the ST. Now, on to the reviews.

****

Santa Clarita Valley (October '86)
-How to build a replacement XL power supply.
-XE console key fix.
-New 8-bit products.

Phoenix (September '86)
-A review of the spreadsheet A-Calc for the ST.
-Beginners hints on ST word processing.

SNACC (November '86)
-A review of the Avatex 300/1200 baud modem.
-How to install a write protect switch on a 1050 drive.
-ST news.
-New owner news.
-A review of the Flight Simulator II scenery disks.

The RI Reporter (October '86)
-A review of Leader Board golf for the ST.
-A review of Fight Night.
-An article on ST Basic's GOTOXY command.

-A comparison of BBS Express and BBCS.
-An ST Mouse pointer program in ST Basic.

Status (November '86)
-An article on file compression progams.
-An article on home made RAM upgrades.
-A review of Star Glider for the ST.
-How to build a solid state ring detector for your 1030 modem.

SLCC Journal (November '86)
-A review of the Animation Station.
-A review of Basic View basic debbuger.
-A review of the EPYX 500XJ joystick.
-A review of the LDW Basic Compiler for the ST.

JACG (October '86)
-An article on the programming language LISP.
-An article on expert systems.
-A review of Fooblitzky.
-A review of Fight Night and World Karate Championship.

Pokey (October '86)
-An ACTION Tutorial.
-A review of Spellpack - a proofreader for Paperclip.
-A review of MPP Express.
-A review of Fontwriter for the ST.
-A short tour of the OSS BBS.
-A review of Cornerman for the ST.

LAACE (December '86)
-An article on laser printers.
-Secret Atari graphics modes.

SLCC Journal (December '86)
-Absolute saftey for M/L routines hardware modification.
-A review of Rubber Stamp.

Milatari (January '87)
-How to solve Zork I.

-A review of the GEnie online system.
-A review of Ninja.

Pokey (November '86)
-A review of The Skunk, a disk back-up program.
-A review of the New Aladdin.
-Writing letters to software companies.
-A review of Gulf Strike.
-An ACTION Tutorial.

STACI (Mar./Apr. '86) (ST only)
-An article on the Event_Multi command.
-A full screen machine language editor program in ST Basic.
-A begginer's guide to modems.
-A review of EZ RAM 520 1Meg upgrade.
-A review of Black Cauldren and Music Studio.
-An article on the generalized drawing primitives in C.

Oregon ACE (Dec./Jan. '87)
-A review of Zoomracks 2 for the ST.
-A review of Power Plan for the ST.
-A shoppers guide to ST software.
-Cribbige program for the 8-bit.

****

Well that's all for now. By the next meeting I should have most of my newsletter index ready. You can use the index to find articles or reviews on almost any subject. See you at the meeting.
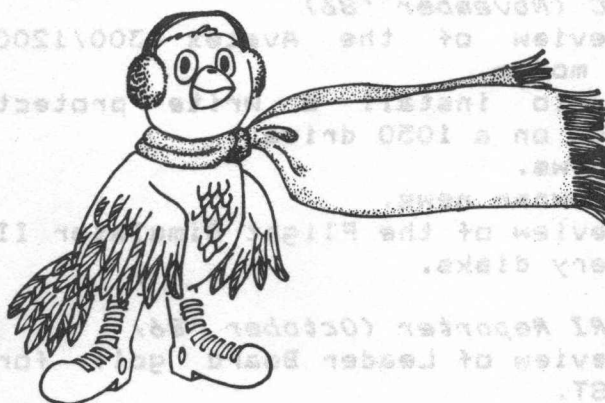
TREASURER'S REPORT
by Jim Woolf

The pie charts on the following page show the breakdown of Income/Expenses that occurred from January 1986 to December 1986.

On the Income chart SHIRTS/RIBBONS is the profit realized from our T-shirt and printer ribbon sales. As the chart shows, membership dues accounted for 37% of our income. Disk sales of our own Print Shop Graphics disks (vol. 1, 2 and 3) in addition to our disk of the month sales accounted for an additional 29% of the total amount of the club's treasury.

The Expense chart shows what was spent by JACS. The printing of the newsletter plus postage accounted for 33% of the expenses by the club while BBS Express Bulletin Board accounted for only 3%.

I will answer any questions about these charts at the next meeting on Wednesday February 18.

JACS INCOME 1986

ATARI—3%
DOM—16%
SHIRTS/RIBBONS—3%
MISC—4%
HARDWARE—12%
TRENTON SHOW—5%
ADS—2%
50/50—4%
PRINT SHOP V.1.2.3—14%
DUES—37%

JACS EXPENSES 1986

HARDWARE—18%
RENT—7%
APRIL MEETING—2%
BLANK DISKS ST/XE—12%
DOOR PRIZES,ETC.—4%
BBS OPERATION—3%
EDITOR—3%
SHIRTS/RIBBONS—3%
NEWSLETTER PRINTING—25%
MISC—8%
CHAIRMEN—6%
POSTAGE—9%
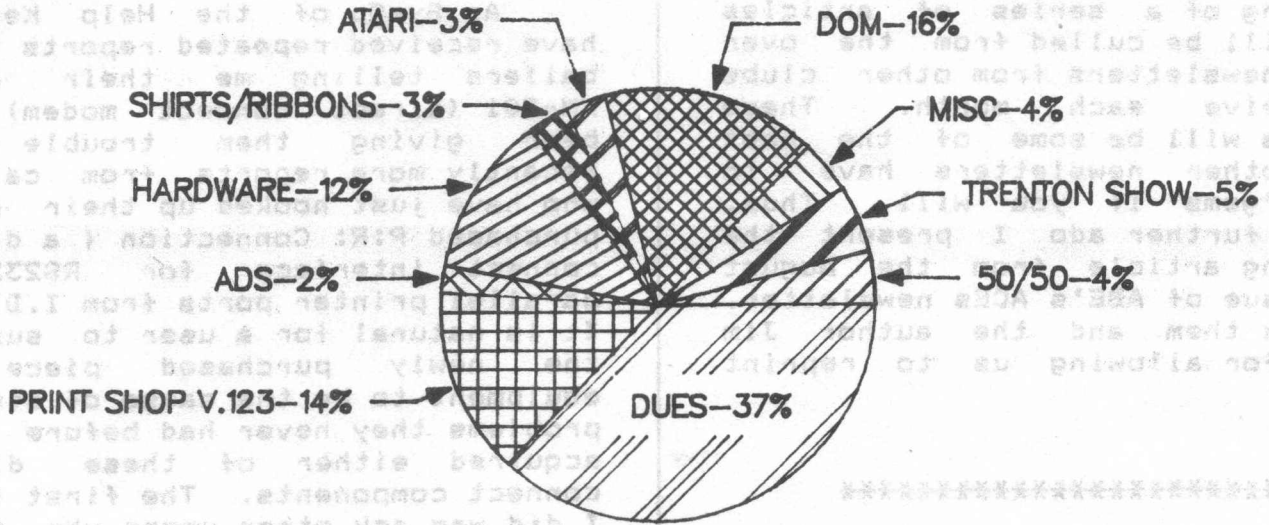
Exchange Newsletter Gems
by Daniel Boris

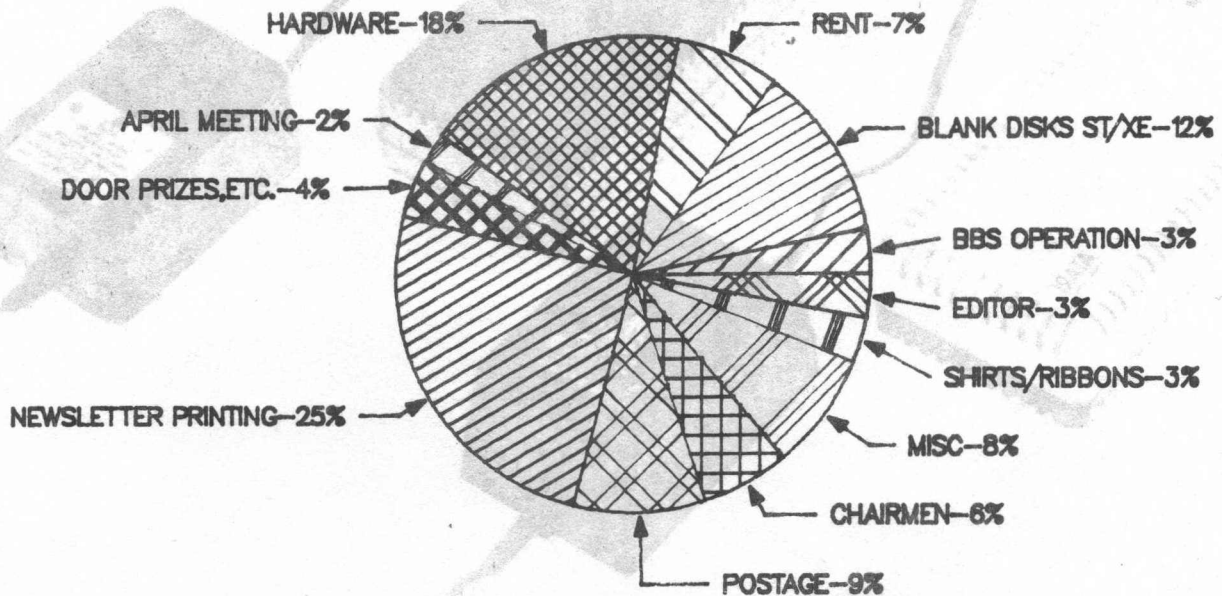The following article marks the beginning of a series of articles which will be culled from the over thirty newsletters from other clubs we receive each month. These articles will be some of the best those other newsletters have to offer, "gems" if you will. Thus, with no further ado I present the following article from the August 1986 issue of ABE's ACEs newsletter. We thank them and the author Jim Finley for allowing us to reprint it.

****

XL/XE Power Supplies
A HARDWARE MYSTERY SOLVED
by Jim Finley

As SysOp of the Help Key, I have received repeated reports from callers telling me their Atari XM-301 (direct connect modem) has been giving them trouble and recently more reports from callers who have just hooked up their newly purchased P:R: Connection (a direct connect interface for RS232 & parallel printer ports from I.D.C.). It is natural for a user to suspect the newly purchased piece of equipment to be the cause of strange problems they never had before they acquired either of these direct connect components. The first thing I did was ask other users who owned XM-301's and or P:R: interface if they had experienced similar problems. To my surprise just as many users reported NO problems with
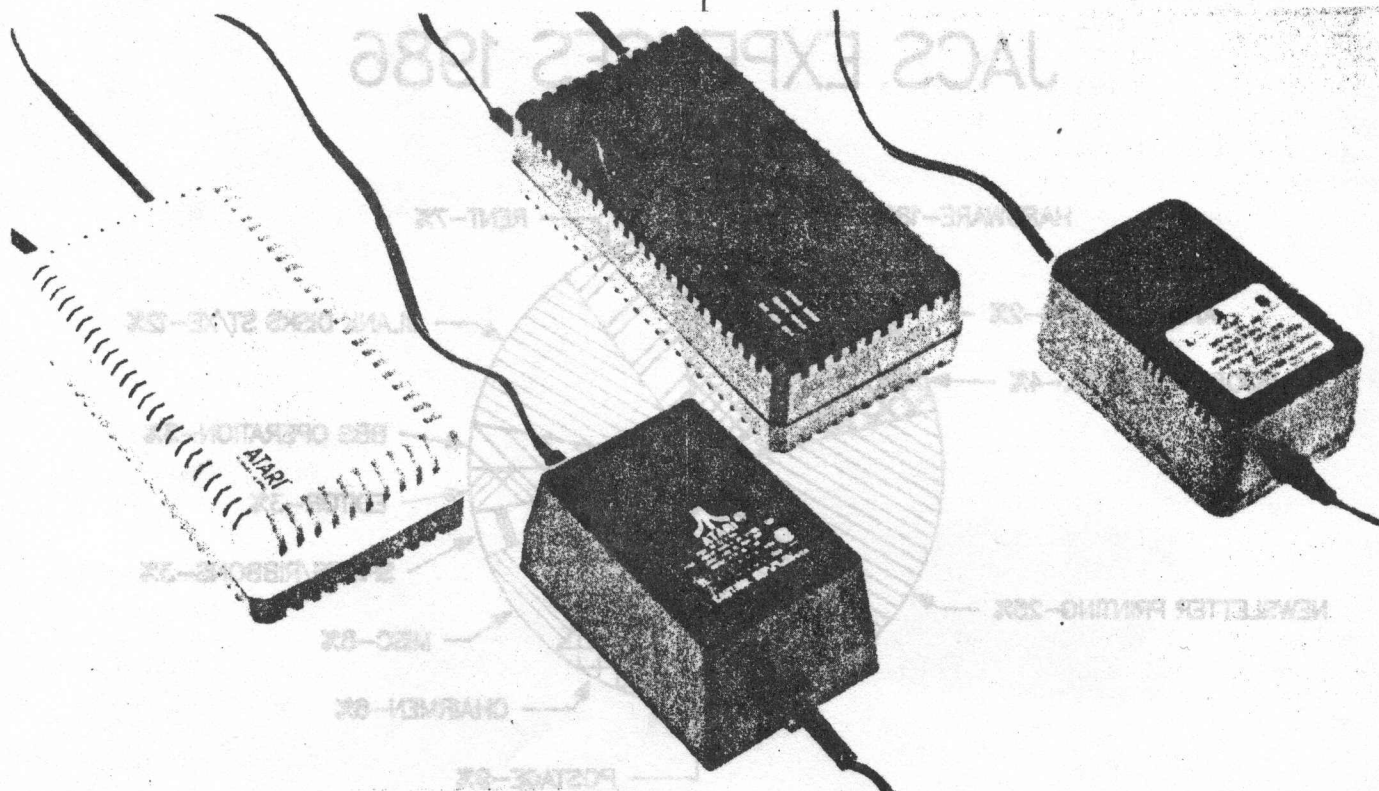
Pictured above, TYPE I (left), II (front center), III (rear center), and IV (right) power supplies for the Atari XL/XE computer line. [Photo by D.P.John]

the same equipment arrangement. The next step taken was to try an XM-301 on my equipment. The XM-301 that didn't work on my friends 800XL worked fine on both my 130XE & 800XL. No doubt about it, the XM-301 was working fine. What could it be, all the equipment was the same EXCEPT the power supply! I looked through all my specification books but no information relating to the power supply was to be found.

Before going any further, I would like to explain that there are 4 types of power supplies that have been shipped with the XL/XE series computers.

Type I - was shipped with early production 800XL's until about the winter of 1984. It has a white cover w/black base. Measures 9" long 4" wide and about 2 1/2" high. It is the only power supply made in Hong Kong.

Type II - appeared in 1984 prior to the Traniel take over and seems to be the most frequently encountered. It is also the heaviest, hottest and the ugliest of the 4 power supplies. The added weight is due to the inside of the supply being filled with epoxy which makes it impossible to repair.

Type III - is th same as Type I but is all black in color. It is the only supply which specifies use on the 800XL & 130XE.

Type IV - has been available since the spring of 1985. It is the smallest, lightweight, coolest and the most sophisticated (electronically) of the XL supplies. It is also the standard supply shipped with the 130XE. This supply is slightly larger than the type 2 supply and has a silver metal label displaying the specs.
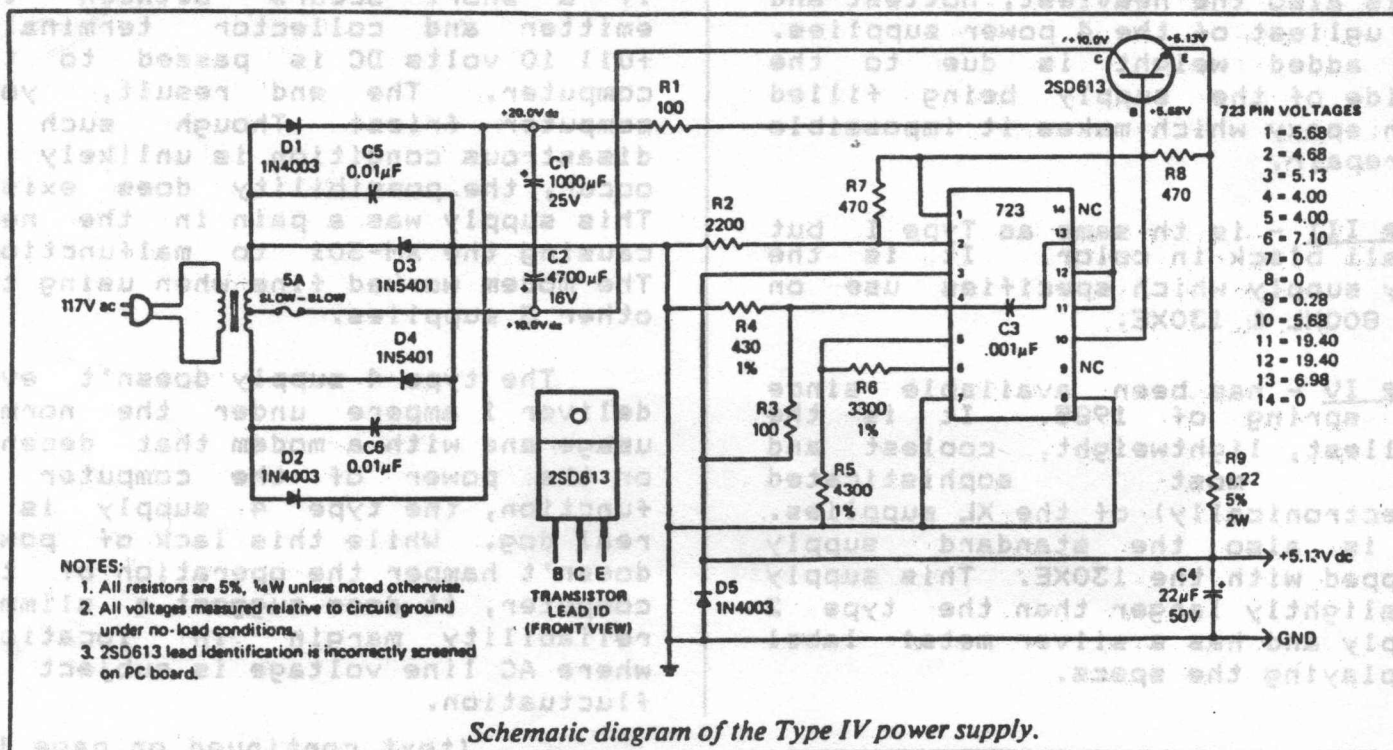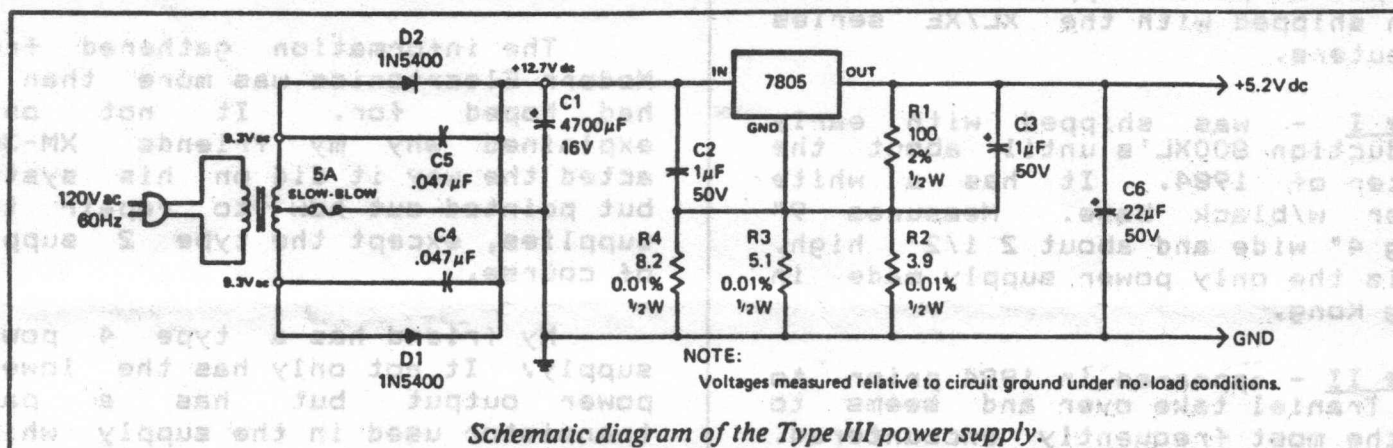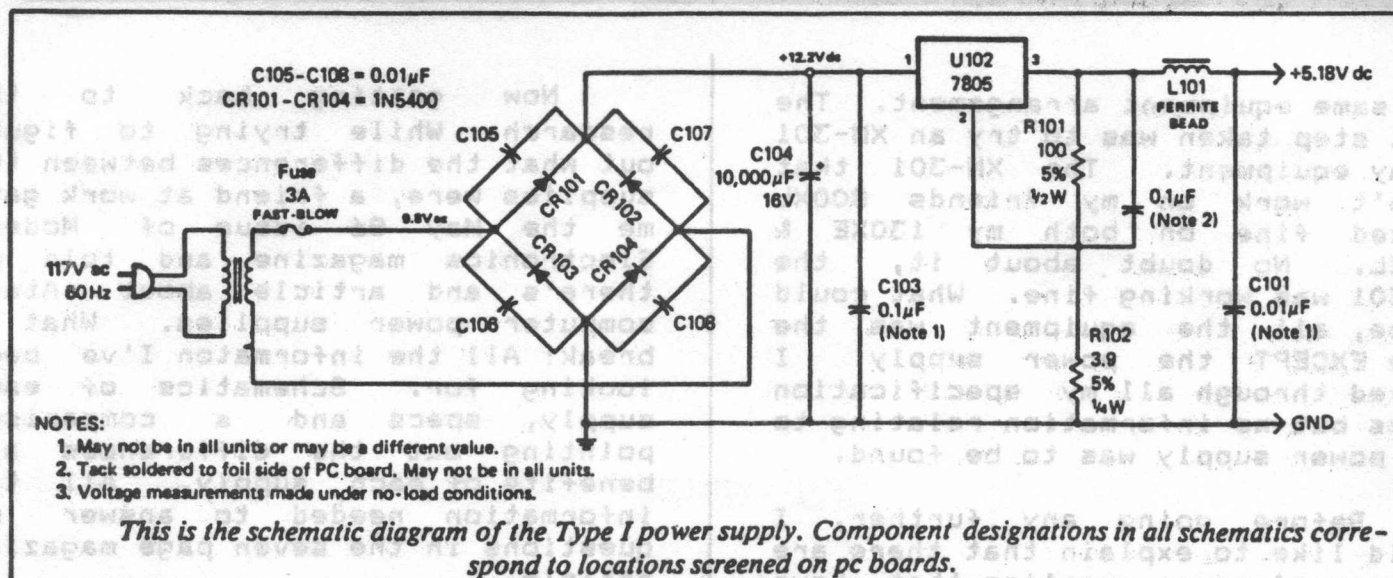
Now getting back to the research. While trying to figure out what the differences between the supplies were, a friend at work gave me the May 86 issue of Modern Electronics magazine and told me there's and article about Atari computer power supplies. What a break! All the informaton I've been looking for. Schematics of each supply, specs and a comparison pointing out the differences and benefits of each supply. All the information needed to answer my questions in the seven page magazine article.

The information gathered from Modern Elecrtonics was more than I had hoped for. It not only explained why my friends XM-301 acted the way it did on his system but pointed out how to repair the supplies, except the type 2 supply of course.

My friend has a type 4 power supply. It not only has the lowest power output but has a pass transistor used in the supply which if a short occurs between the emitter and collector terminals, full 10 volts DC is passed to the computer. The end result, your computer fries! Though such a disastrous condition is unlikely to occur, the possibility does exist. This supply was a pain in the neck causing the XM-301 to malfunction. The modem worked fine when using the other 3 supplies.
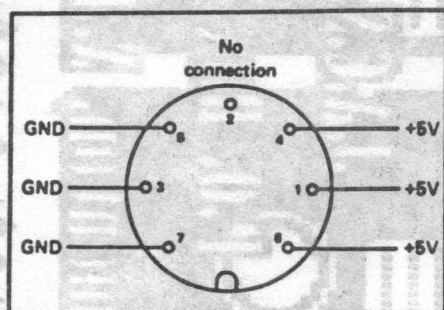
The type 4 supply doesn't even deliver 1 ampere under the normal usage and with a modem that depends on the power of the computer to function, the type 4 supply is a real dog. While this lack of power doesn't hamper the operation of the computer, it does suggest a slimmer reliability margin in locations where AC line voltage is subject to fluctuation.

C105-C108 = 0.01µF
CR101-CR104 = 1N5400

NOTES:
1. May not be in all units or may be a different value.
2. Tack soldered to foil side of PC board. May not be in all units.
3. Voltage measurements made under no-load conditions.

This is the schematic diagram of the Type I power supply. Component designations in all schematics correspond to locations screened on pc boards.

Schematic diagram of the Type III power supply.

NOTE:
Voltages measured relative to circuit ground under no-load conditions.

NOTES:
1. All resistors are 5%, ¼W unless noted otherwise.
2. All voltages measured relative to circuit ground under no-load conditions.
3. 2SD613 lead identification is incorrectly screened on PC board.

TRANSISTOR
LEAD ID
(FRONT VIEW)

723 PIN VOLTAGES
1 = 5.68
2 = 4.68
3 = 5.13
4 = 4.00
5 = 4.00
6 = 7.10
7 = 0
8 = 0
9 = 0.28
10 = 5.68
11 = 19.40
12 = 19.40
13 = 6.98
14 = 0

Schematic diagram of the Type IV power supply.

SCHEMATICS REPRINTED FROM MAY 1986 ISSUE OF MODERN ELECTRONICS

My friend has decided to purchase another power supply from a mail order house for $35.00. He said it's a small price to pay for all the headaches he has been having.

Pinout descriptions for XL/XE connector on cable that goes to the computer.

The schematics that accompany this article were taken from the Modern Electronic's article. Believe me, without these specs and drawings, you could end up in a world of confusion trying to figure out why certain equipment works on your friends system but not on your own system even though the systems seem to be identical.

Atari XL/XE Power Supply Characteristics				
Characteristic	I	II	III	IV
Aesthetic appeal	superb	rotten	nice	so-so
Interior accessibility	easy	impossible	easy	difficult
Ease of repair	easy	impossible	easy	tedious
Output Rated Amperes	1.5	1.5	1.5	1.5
Volts	5.0	5.0	5.0	5.0
Measured Amperes	1.44	1.15	1.29	0.93
Volts	4.90	4.90	4.90	4.90

A NOTE FROM THE EDITOR...

Since I have been editor of BETWEEN BYTES, I have very rarely used reprints of articles found in other newsletters. I have felt that to develop a better newsletter, we must cultivate the talent within our own membership. While I felt that way, I also realized the vast amount of talent residing outside our club. That was my thinking when Daniel Boris suggested the idea behind our new column, "Exchange Newsletter Gems". This column will contain articles which Dan feels are the best he has seen. Be sure to take a look at the article this month on XL/XE power supplies. Speaking as someone who has fried a power supply, it should be considered required reading.

A round of thanks and congratulations are in order for Kevin Babcock. Kevin has voluntered to be our Advertising Chairman. It will be nice to see some advertisements between our pages.

MEMBER ADS
> Items for Sale <

Atari 1030 Modem complete with 1030 Express terminal software. All for only $30. Call Shawn McGovern at 848-8065.
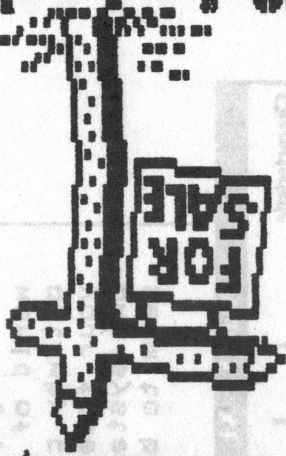
JACS provides this space to any member for the sale of any hardware or software. All software must include the original documentation. Please send any ads to:

JACS
P.O. Box 710
Clementon, NJ 08021

Pleases be sure to inform the editor when an item has been bought or sold so that it may be removed from this list.